**[SCHOOL LETTERHEAD AND LOGO]**

[COMPLETE SCHOOL ADDRESS]





**[CLASS SUBJECT]**

**Submitted to:**

[NAME OF PROFESSOR]

[NAME OF CLASS SUBJECT]

**Submitted by:**

[NAME OF STUDENTS]

[NAME OF CLASS SECTION]

**[MONTH DAY YEAR]**

**Table of Contents**

|  |  |
| --- | --- |
| 1. Introduction |  |
| 2. Abstract |  |
| 3. Key Objective |  |
| 4. Methodology |  |
| 4.1. Nature of the Experiment |  |
| 4.2. Materials |  |
| 4.3. Laboratory Procedures |  |
| 5. Calculation and Findings |  |
| 6. Results |  |
| 7. Conclusion |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

**1. Introduction**

This laboratory report contains a sample experiment created by the student researchers of [Class Section] as a performance task requirement of [CLASS SUBJECT]. This laboratory report is due on [MONTH DAY YEAR].

**2. Abstract**

The student researchers are set to conduct an experiment to answer the questions of its proponent, [NAME OF THE PROPONENT]. The proponent owns a diner who sells breakfast meals. It is famous for its delicious omelets. With this demand, the proponent has purchased a large number of eggs from a local supplier. The proponent is afraid that the eggs may not be fresh enough to make quality omelets for the breakfast meals since the eggs have been stored for too long.

This laboratory report contains information on how the proponent can determine the freshness of the eggs using saline solution and density measurement. By defining such values, the proponent can identify which of the eggs are fresh or stale using a simple experiment.

**3. Key Objective**

The key objective of this laboratory report is to define the various densities of eggs relative to the varying degrees of their freshness. With the results of this report, the student researchers aim to know which eggs can be used by the proponent in preparing the famous omelet dish.

**4. Methodology**

The following materials and procedures were used during the laboratory experiment of the student researchers conducted in [LOCATION].

**4.1. Nature of the Experiment**

The student researchers prepared a salt solution where the eggs just float. They were looking at the mass and volume measurements. The values were calculated by the student researchers to determine the density of the salt solution and the egg itself. Comparisons were made by the student researchers between a fresh egg and an old one.

**4.2. Materials**

The student researchers needed the following materials to conduct the aforementioned experiment:

4.2.1. Eggs in an Egg Tray

4.2.2. Tap Water

4.2.3. Table Salt (Sodium Chloride)

4.2.4. Laboratory Equipment

**4.3. Laboratory Procedures**

4.3.1. Predict which of the eggs on the egg tray are denser. Mark fresh eggs as “F”

and old ones as “S or O.”

4.3.2. Make a saline solution using 0.0 ml water and salt scooped using a plastic

spoon. Be sure to stir the solution thoroughly until the salt dissolves.

4.3.3. Place the eggs on the saline solution. Start with those eggs marked as “F” and

see if they just float. This means that the top of the egg touches the top of the saline solution.

4.3.4. Determine the density of the saline solution applied to the fresh eggs using the

laboratory equipment following these methods:

4.3.4.1. [INSERT RELEVANT DETAILS]

4.3.4.2.

4.3.5. Determine the density of the stale or old eggs marked as “S or O” and place

them on the remaining saline solution.

4.3.6. Adjust the concentration of the saline solution by adding either salt or water in

order to make the old eggs just float.

4.3.7. Determine the density of the saline solution applied to the old eggs using the

laboratory equipment following these methods:

4.3.7.1. [INSERT RELEVANT DETAILS]

**5. Calculation and Findings**

The density of the saline solution is calculated using the mass and volume acquired during the laboratory experiment. The following tables show the calculated density for the saline solution where the fresh and stale eggs just floated using the different measuring devices.

|  |  |  |
| --- | --- | --- |
| **Measuring Device** | **Fresh Eggs** | **Stale Eggs** |
| Measuring Device 1   * Mass * Volume | [INSERT DETAILS] | [INSERT DETAILS] |
| Measuring Device 2   * Mass * Volume |  |  |
| Measuring Device 3   * Mass * Volume |  |  |
| Measuring Device 4   * Mass * Volume |  |  |

**6. Results**

The student researchers have determined the following results during the laboratory experiment:

6.1. The fresh eggs needed a saline solution with 0.0 density in order to be considered

“just floating” compared with the stale eggs which needed only a saline solution having a 0.0 density

6.2. The most accurate laboratory equipment to measure the density of the saline

solution is [LABORATORY EQUIPMENT]

6.3. [ADDITIONAL DETAILS]

**7. Conclusion**

From this laboratory report, the student researchers conclude that the proponent will know if the egg is fresh or stale if he/she does any of the following: [INSERT DETAILS].